

ABSTRACTS

[Abstract]

[Object] To improve a chemical resistance and a heat resistance of an electromagnet core used for a liquid fuel injector.

[Solving Means] A core is formed by using a binder 15 for a soft magnetic powder 14, wherein the binder 15 is made of a polyimide resin having a molecular structure having a thermal and chemical stability. A volume ratio of the binder 15 made of the polyimide resin to the soft magnetic powder 14 is in a range of from 0.05 wt% to 1.0 wt%. Since the heat resistance and the chemical resistance of the core can be improved, the core can be used for a valve control electromagnet used for a liquid fuel injector 7 and effectively operated when the core is attached to an engine.

[Selected Figure] Fig. 2